

and *Loganiaceæ*, according to M. Alphonse DeCandolle) is variable. He next refers to *Broussonetia* and *Morus* and to *Stilbe*, which latter he is disposed to consider as related to *Empetrea* and *Euphorbiaceæ*, and then proceeds to the examination of *Cupuliferæ*, among which he finds extensive variations. He refers to *Coriaria* as agreeing with *Malpighiaceæ* in having its raphe turned away from the placenta and consequently next to the dorsal rib of each carpellum, which he describes as corresponding with the general position of the funiculus in that family. He describes the carpella of *Mirabilis* as being all lateral and internal; and again notices the peculiarities which he had before referred to in the position of the funiculus in *Chenopodeæ*, *Amaranthaceæ* and *Illecebreæ*, adding some remarks on the carpella of *Polygoneæ* and *Alsineæ*. He indicates certain characters in the flower of *Casearia* in which it approaches *Monotropa*, *Drosera*, and especially *Francoa*. In *Thymeleæ* he finds considerable variation in the position of the carpellum, and states that the relative position of carpellum and segments of perianthium is the reverse of what takes place in *Proteaceæ*, the carpellum being always opposite to one of the segments of the perianthium. The tendency to the suppression of stamens in *Thymeleæ* is also the reverse of that of *Proteaceæ*, being on the side opposite to the carpellum. In *Pimelea* and *Lachnæa* he states that the carpella are all posterior, while in *Daphne* the carpella of the two-flowered axillæ stand with their backs to each other, or more or less turned towards the stem: *Dais* is a mixture of these. Lastly, he notices various peculiarities in the ovary of *Sassafras officinale*, in *Sanguisorbeæ*, in *Combretum*, in *Aucuba Japonica* and in *Marlea*.

ROYAL IRISH ACADEMY.

April 28, 1851.—Rev. T. R. Robinson, President, in the Chair.

Professor Allman read a notice of the emission of light by *Anurophorus fimetarius*, Nicholi (*Podura fimetaria*, Linn.). During a walk over the Hill of Howth near Dublin, on a dark night in February last, he was struck with a luminous appearance in the earth when disturbed to the depth of three or four inches; the light proceeded from numerous distinct points and lasted for more than a minute after its first appearance. On carrying home some of the phosphorescent earth, Dr. Allman was enabled to trace the phænomenon in question to the presence of numerous living individuals of *Anurophorus fimetarius*, from each of which there proceeded in the dark a faint but very evident emanation of light. Specimens of the insect preserved alive in a glass phial continued for many nights to exhibit this beautiful phænomenon, which was also witnessed by Dr. Stokes and Mr. Haliday, as well as by numerous other friends whose attention was directed to it by Dr. Allman. The light could not be traced to any definite point in the insect. The *Anurophorus* was very abundant on the hill, and subsequent observation proved that the dark peaty soil which abounds in some places on Howth, was almost the only part of the district from which it could be affirmed to be absent.